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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,081	03/12/2004	Saburou Abe	3216/1	8512

23638 7590 11/09/2007
ADAMS EVANS P.A.
Suite 2350 Charlotte Plaza
201 South College Street
CHARLOTTE, NC 28244

EXAMINER

HARDEE, JOHN R

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,081	Applicant(s) ABE ET AL.	
	Examiner John R. Hardee	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-28 and 30-40 is/are pending in the application.
 4a) Of the above claim(s) 31-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 25-28 and 30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's traversal of the restriction requirement is moot, as the requirement has already been made final.

2.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 25-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eaton et al., US 6,818,146 for the reason of record in the previous office action.

5. Claims 25-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/061044 A2 in view of Eaton et al., US 6,818,146. The WO is in German.

Reference is made to column and line in Wulff et al., US 2004/0253490 A1. Wulff discloses deionized water coolants for fuel stacks which may further comprise ethylene glycol [0006]. Conductivities of less than 1 microS/cm can be obtained using the system [0039]. Addition of anticorrosion agents is disclosed at [0033]. Use of dyes and antifoaming additives is not disclosed. Eaton discloses cooling media for fuel cells (col. 1, lines 10+). The coolant comprises propylene diol and water. The addition of antifoaming compositions is disclosed at col. 3, along with a teaching that these are well known. The examiner takes the position that since these compositions are being compared with ethylene glycol/water compositions, that use of same in glycol/water compositions would be well known as well. In addition, dyes may be added (see

claims). It would have been obvious to add antifoamers for the reasons given above, and to add dyes to obtain the advantages obtained by Eaton in the use of same. It would be further obvious to use a nonionic dye, because Wulff discloses a composition which undergoes continuous deionization, which would otherwise remove all dye from the compositions. Regarding the specifically recited dyes, the examiner takes the position that these are well known, being commercially available and having trivial names, so use of any particular dye would be obvious in the absence of the disclosure of any unexpected properties.

6.

Response to Arguments

7. Applicant's arguments filed October 12, 2007 have been fully considered but they are not persuasive. Regarding the Yang and Wulff references, applicant is correct; they are not prior art and the rejections have been withdrawn. The PCT parent of Wulff is prior art however, and a rejection over the PCT in view of Eaton has been added. Applicant's newly added limitation reciting colorfastness does not overcome the prior art, as use of a nonionic dye is motivated by the references.

8. This action contains a rejection which was not motivated by applicant's amendments. Accordingly, it is NOT FINAL.

9.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (571) 272-1318. The examiner can normally be reached on Monday through

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Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Mr. Harold Pyon, may be reached at (571) 272-1498.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "J. Hardee", with a stylized, cursive script.

John R. Hardee
Primary Examiner
November 5, 2007